

Claims

1. Method for allocating radio communication resources (R1, R2) in an at least partially self-organizing radio communication system comprising a plurality of user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12), whereby the radio communication system comprises at least one central entity (AP/CC; AP/CC 1, AP/CC 2) for organizing the allocation of radio communication resources (R1, R2), characterized in that resources (R1, R2) for a direct communication (DiL phase) between at least two user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12) in each case are allocated on a multiple basis at least partially by at least one central entity (AP/CC; AP/CC 1, AP/CC 2).
2. Method according to Claim 1, characterized in that the at least one central entity (AP/CC; AP/CC 1, AP/CC 2) allocates the resources (R1, R2) on a multiple basis in the situation when the direct communication between the at least two user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12) communicating with one another in each case while using the same resources (R1, R2) meets certain quality requirements.
3. Method according to Claim 1 or 2, characterized in that at least two first user stations (MT1, MT2) communicating with one another while using the same resources (R1) and at least two second user stations (MT4, MT5) communicating with one another while using the same resources are in each case situated in different areas (B1, B2) of the radio communication system, between which essentially no interference exists during the communication while using the resources (R1).
4. Method according to one of Claims 1 to 3, characterized in that

user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT8, MT9, MT10, MT11, MT12) at least partially report accessible user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT9, MT10, MT11, MT12) to the at least one central entity (AP/CC; AP/CC 1, AP/CC 2) for a

5 direct radio communication.

5. Method for allocating radio communication resources (R1, R2) in a cellular radio communication system having a plurality of user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10,

10 MT11, MT12),

whereby the radio communication system comprises at least one central entity (AP/CC; AP/CC 1, AP/CC 2) for organizing the allocation of radio communication resources (R1, R2), in particular according to one of Claims 1 to 4,

15 characterized in that

user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT8, MT9, MT10, MT11, MT12) at least partially report accessible user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12) to the at least one central entity (AP/CC; AP/CC 1, AP/CC 2) for

20 a direct radio communication.

6. Radio communication system having a plurality of user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12), which comprises at least one central entity (AP/CC; AP/CC 1,

25 AP/CC 2) for organizing the allocation of radio communication resources (R1, R2),

characterized in that

means are provided whereby resources (R1, R2) are allocated on a multiple basis at least partially by the at least one central entity (AP/CC; AP/CC 1, AP/CC 2) for a direct communication (DiL phase) between at least two user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12) in each case.

7. Radio communication system according to Claim 6,

35 characterized in that

the at least one central entity (AP/CC; AP/CC 1, AP/CC 2) is equipped with means for receiving reports such that user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12)

can at least partially report accessible user stations (MT1, MT2, MT3, MT4, MT5, MT6, MT7, MT8, MT9, MT10, MT11, MT12) to the at least one central entity (AP/CC; AP/CC 1, AP/CC 2) for a direct radio communication.

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8. Radio communication system according to Claim 6 or 7, characterized in that the radio communication system at least partially exhibits a cellular structure (ZG).

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